

EPA

**Moderator: Lynne Jennings
September 22, 2020
6:00 p.m. ET**

OPERATOR: This is Conference #: 8377541

Operator: Hi, everyone. My name is (Jeff) and I will be your conference operator today. At this time, I would like to welcome everyone to the Olin Virtual Public Hearing Conference Call. All lines have been placed on mute to prevent any background noise. If you should need assistance during the call, please press “star” then “0” and an operator will come back online to assist you.

Thank you. I would now like to turn the call over to Ms. Lynne Jennings. You may begin your conference.

Lynne Jennings: Good evening, everyone. Thank you for joining us tonight for this public hearing on the Olin Chemical Superfund Site located in Wilmington, Massachusetts. I’d like to turn the meeting over quickly to (Rosa Diego) who’s going to provide some quick instructions on how to operate the Adobe Connect platform. Thank you.

(Rosa Diego): Thank you, Lynne. Good evening, everyone. Welcome to the Adobe Connect Virtual Meeting Room. I will explain the Adobe Connect layout you see in front of you.

The first slide, going through it counterclockwise is the audio control located on the top left of your screen. Click on the dropdown arrow and choose “Mute Conference Audio Only”. This will avoid any feedback and background noise.

On the top left corner is the Welcome pod. Media and logistics and information will be provided in this window. If you have preregistered through us to ask a question during the Q&A session or provide a comment, please dial the number provided on the Welcome view.

Right down below the Welcome pod is the Technical Support chat box. Use this chat box to get technical support from the Adobe Connect staff online.

Next is the Live Captioning pod. The captioning text would be shown here. In the middle of the screen, the presentation will be shown in this window. To the view the presentation full screen, click on the four small arrow image top right corner under the word Help. Keep in mind, if you expand to full screen, you may not be able to see the live closed captioning.

Next slide. If you're not – if you did not hear the music playing when you first logged in to the Adobe Connect, we recommend from your PC to look for the speaker icon that appears on your computer generally found on the bottom right corner of your computer screen.

Click the icon. Unmute and/or increase the volume. If you're using a Mac computer, as shown on this slide, go the System Preferences. Select the sound icon, select the Output tab, choose the speakers you'll be using, unmute and/or increase the output volume.

Next slide. If you continue having issues with audio, click on the Audio Controls located on the top left of your screen. Click on the dropdown arrow, make sure the speaker is unmuted or choose Adjust Speaker Volume to open up the settings to adjust volume on your speaker, increase the volume as needed and select Okay. And just to reiterate, please use the Technical Support chat box if you need any assistance from the Adobe Connect Support Team.

Now, I'll turn it over to Lynne Jennings. Thank you.

Lynne Jennings: Thank you, Rosa. Again, my name is Lynne Jennings and I am the Section Chief of EPA's Massachusetts Superfund Section.

I'd like to welcome you all to this public hearing on the Olin Chemical Superfund Site in Wilmington, Mass. The purpose of tonight's event is to present a brief recap of EPA's proposed cleanup plan for the site and to provide the public an opportunity to make formal oral comments on EPA's proposed plan.

Slide 2, please. The agenda for tonight's event will be as follows: First, I will provide some basic instructions for participation. Next, I will turn the meeting over to EPA Project Manager Josh Fontaine who will recap the range of alternatives considered for the cleanup and EPA's preferred alternative.

Following Josh's presentation, I will explain how you can submit comments on our plan. And after the presentation, we will begin the formal hearing.

Slide 3. Now, I'd like to review some basic instructions for participating. Many of you have joined this event using your computer and are linked to Adobe Connect found on our website. This allows you to view and listen to the presentation and hearing through your computer.

However, please note that your microphone in Adobe Connect will be muted by us to eliminate background noises. Some of you may be watching this event through Wilmington's Community Television, WCTV. For the formal hearing, our website contains instructions for how to preregister to participate. Those that preregistered should have received instructions with a telephone number and conference code.

If you did not preregister but want to make a comment tonight, you may dial the number and enter the conference code provided on this slide to get in the queue for providing the comment. We will keep the number posted in the corner of the screen. If you are dialing in, please mute the audio on your computer to eliminate background noise. Once we get to the formal hearing, I will provide additional instructions on how to participate.

Everyone watching via Adobe Connect, cable TV and listening via the phone lines will be able to hear all remarks. Now, I will turn the meeting over to EPA Project Manager Josh Fontaine.

Josh Fontaine: Slide 4. Good evening, everyone. Thank you for joining us tonight. My name is Josh Fontaine and I am one of the project managers for the Olin Site together with Melanie Morash.

To recap, EPA evaluated a variety of cleanup options for the site, grouping them as shown on this slide, to address the different media impacted. First, a range of alternatives were established to address Dense Aqueous-Phase Liquid or DAPL in groundwater hot spots with the goal of an interim action to remove these ongoing sources. It is an interim action, cleanup action because we don't know the full extent of impacts to groundwater and further studies are ongoing under our data gaps workplan. A final action for groundwater will be proposed at a later date.

Next, a separate set of alternatives were developed for a final action to address Light Non-Aqueous Phase Liquid or LNAPL and the ongoing discharge of contaminated groundwater into surface water.

Finally, a set of alternatives were developed for a final action to address the soil and sediment contamination.

Slide 5. EPA considered a range of alternatives for the internal cleanup of DAPL in groundwater, including no action. Each alternative is increasingly more aggressive in removing and treating various concentrations of N-nitrosodimethylamine or NDMA.

EPA's preferred alternative is Alternative 3 which consists of removing DAPL by installing approximately 20 extraction wells, installing six additional extraction wells for removing groundwater hot spots with concentrations of NDMA greater than 5,000 nanograms per liter and constructing a new onsite treatment system.

Slide 6. This slide shows a conceptual layout of EPA's preferred alternative with DAPL extraction wells shown in green and hot spot groundwater extraction wells shown in blue.

An estimated two to three years will be needed for design and construction, and the operational time for this interim action is estimated to be eight years.

The cost of this interim remedy is \$35.5 million which is EPA's first step in the cleanup of the aquifer.

EPA prefers this alternative for the following reasons: One, uncontrolled DAPL sources which are a major source of contamination to downgradient water and are highly toxic will be removed and treated.

Groundwater hot spots – sorry, 2, groundwater hot spots will be removed and treated, thereby limiting the further spread of highly contaminated groundwater which acts as a source of contamination to the aquifer.

Three, the alternative provides the best balance between the amount of contaminant mass removed, approximately 7,000 grams of NDMA for the volume of groundwater that must be extracted to achieve this reduction, approximately 68.4 million gallons.

At contrast, Alternative 2 would remove approximately 40 percent less NDMA mass and Alternative 4 would require the extraction of 40 million additional gallons of groundwater to achieve only a modest 4 percent increase in the mass of NDMA removed.

And 4, of the three action alternatives considered, this option has moderate costs, \$35.5 million as compared to \$22.5 million for Alternative 2 and \$40.5 million for Alternative 4.

Under this alternative, an estimated 68 million gallons of DAPL in highly contaminated groundwater will be pumped out of the aquifer and treated in a new treatment system. The exact location of the new treatment system will be determined during the design phase.

DAPL will be treated by line precipitation to remove metals with subsequent evaporation, dewatering and off-site disposal of the liquid and flood materials in a permitted facility.

Additional treatment will be provided for the highly contaminated groundwater via an influent equalization tank, a Hypochlorite flash mixer for oxidation and removal of metals, break point chlorination to treat ammonia,

removal of particulates and filtration to dewater solids, granular activated carbon to remove volatile compounds, UV photo oxidation to break down NDMA, and finally, discharge of the treated water to surface water. The exact location of the discharge outfall of treated water will be determined during the design phase.

Slide 7. Another component of the EPA's preferred alternative for groundwater is ongoing studies within the groundwater study area, which is shown on this slide outlined in red and which may be expanded or decreased in the future based on new information. Investigations will continue to close remaining data gaps in groundwater. And the results of these efforts will be used to evaluate long-term groundwater cleanup options leading to the selection of a final groundwater cleanup for the Olin site.

Until final cleanup rules for groundwater are selected and achieved, a set of land use restrictions, also called institutional controls will be implemented within the Olin study area that would prohibit the unauthorized use of groundwater.

In this area, EPA, in consultation with Massachusetts Department of Environmental Protection, will be further evaluating existing wells. Examples of institutional controls include notice of activity and use limitations, count ordinances, advisories, building permit requirements or other administrative controls.

The institutional controls will be developed to accomplish the following. One, prohibit future residential use at the Olin property. Two, prohibit the use of groundwater in the study area for drinking, irrigation or industrial purposes; unless it can be demonstrated to EPA that such use will not pose unacceptable risks, has further migration of groundwater contaminant plume or interfere with EPA's chosen cleanup remedy.

Three, prevent disturbance of the infrastructural components of the remedy. Four, prevent contact with soil beneath cover systems. And five, prevent unacceptable vapor intrusion related exposures to Trimethylpentanes or TMPs.

Slide 8. EPA considered a range of alternatives for the final cleanup of LNAPL in surface water including no action. The second and third alternatives consist of different strategies based on multi-phase extraction or MPE and groundwater extraction and treatment, while the fourth alternative consists of excavation to address the LNAPL and permeable reactive barriers to treat contaminated groundwater.

EPA's preferred alternative is Alternative 3, which consists of the demolition of Plant B, installing five MPE wells to capture LNAPL, a targeted approach for groundwater extraction to prevent discharges to surface water, and installation of a new treatment system to treat groundwater.

Slide 9. This slide shows the conceptual layout for EPA's preferred alternative in which Plant B located in the northeastern portion of the Olin property would operate until the groundwater treated there could be rerouted to a new groundwater treatment system.

This new system will be the same system that will treat the extracted LNAPL in hot spot groundwater. Once Plant B is demolished, an estimated five MPE wells would be installed within the LNAPL footprint to remediate LNAPL, the smear zone and dissolved-phase site contaminants that would otherwise impact East Ditch Stream.

A treatment system consisting of an oil water separator and granular activated carbon would be – would treat the extracted water and soil vapor and the recovered LNAPL would be disposed off-site at a permitted facility.

Under this alternative, extraction wells would be installed along Off-Property West Ditch Streams, at locations upgradient of the weir in the upper portion of the South Ditch Stream, in midway along South Ditch Stream between the weir and a confluence with East Ditch Stream to intercept and treat the overbearing groundwater contaminant plume that impacts these streams.

An estimated two to three years will be needed for design and construction and a 30-year timeframe was used for cost estimation for operation, maintenance and monitoring. EPA estimates the cost of this alternative will be \$6.6 million.

EPA prefers this alternative for the following reasons. One, it achieves substantial risk reduction by treating LNAPL via multi-phase extraction which uses standard and readily available equipment. Two, the demolition of Plant B provides accessibility to previously inaccessible entire footprint of the LNALP contaminated zone for treatment.

Three, the alternative uses groundwater extraction and treatment, which is a proven effective technology that allows for optimization, permanently removes site contaminants from groundwater, and prevents contaminated groundwater from impacting the streams.

Four, of the three action alternatives considered, this alternative provides for the greatest reduction of contaminant mobility in volume through treatment. It is the most reliable and easiest to implement. And five, of the three action alternatives considered, this option is more effective in the short term, more extensively reduces the contamination through treatment, and has the lowest costs.

Slide 10. EPA considers – EPA considered a range of alternatives for the final cleanup of soil and sediments to prevent unacceptable human and ecological exposures, including no action. Each alternative is increasingly more reliant on excavation to address the contamination with active treatment of TMPs via air sparging and soil vapor extraction under Alternative 3 to address future vapor intrusion risks.

EPA's preferred alternative is Alternative 2 which consists of: Installing an impermeable cap over the containment area, excavating approximately one to two feet of wetland and sediment soils with off-site disposal, constructing and/or pavement caps in certain upland soil areas, and requiring vapor intrusion evaluations and/or engineered vapor mitigation systems for future buildings.

Slide 11. This slide shows the proposed footprint of the containment area cap in areas of soil contamination requiring cover systems, shown in brown and black. Areas requiring vapor intrusion controls to address future indoor air

risks are shown in green. Wetland soils requiring remediation are shown in red. And sediments requiring cleanup are outlined in purple.

This alternative is estimated to take approximately two years to design and implement and has an estimated cost of \$6.1 million. Under this alternative, the design and footprint of a permanent multilayer impermeable cap for the containment area would be determined during the remedial design phase, which will also include the closure of the equalization window within the slurry wall and grouting in place.

Soil or asphalt cover systems will be placed over areas where soil has concentrations of site contaminants that exceed the proposed cleanup levels. Approximately 4,000 cubic yards of contaminated wetland soil and sediments will be excavated down to one foot and disposed off-site at appropriate permanent facilities.

EPA prefers this alternative for the following reasons: One, this alternative eliminates risks to human health from direct exposure to site contaminants and risks to ecological receptors by removing, disposing, and/or covering contaminated soil and sediments.

Two, the cap for the containment area will prevent unacceptable ecological risks as well as prevent leaching. Three, contaminants in wetland soil and sediments would be permanently removed, thus eliminating future exposures for ecological receptors by excavating and disposing off-site all wetland soil and sediments with levels of site contaminants above cleanup goals and restoring any disturbed wetland and aquatic habitat.

Four, of the three alternatives considered, this alternative is the most reliable and the easiest to implement and creates the least risk to the community, workers, the environment, because the least amount of contaminant soil and sediments are handled.

This alternative minimizes leaching from the containment area via an impermeable cover coupled with closure of the equalization window notched into the slurry wall.

Six, this alternative achieves protectiveness of public health from inhalation risks associated with TMPs at a lower cost than that of the action alternatives considered for TMPs.

Vapor intrusion risk in future buildings will be addressed by institutional controls and engineered controls which will include requirements to conduct evaluations or install engineered systems to prevent unacceptable levels of contaminated vapors from accumulating indoors.

Seven, institutional controls will address soil remaining with concentrations above those allowed for unrestricted use and unrestricted exposure, prevent disturbance of remedial measures, and restrict the use of the Olin property to commercial and industrial.

And eight, of the three action alternatives considered, this option which is equally effective as the other two options has the lowest costs. I will now turn the presentation back over to Lynne.

Lynne Jennings: Thank you, Josh. We are now on Slide 12, and I would like to explain the opportunities for public input.

EPA is seeking input not only on EPA's preferred alternative but also on all of the alternatives evaluated. The 30-day public comment period began on August 26th and was extended an additional 30 days, now running through Monday, October 26th.

Formal comments on the proposed plan or any information in our administrative record can be submitted to EPA at this hearing or in the following ways: By mail sent to Melanie Morash at the address on this slide, by email sent to Melanie's email address on this slide, or by phone, call the dedicated voice mailbox at 617-918-1880 and leave an oral comment.

All comments might be post – emailed or provided orally by October 26th. EPA will consider and provide written responses to all formal comments received during the public comment period in a responsiveness summary attached to the record of decision.

This concludes our presentation. We will now begin the formal hearing. This portion of the meeting will be recorded and transcribed for the administrative record. Clive could you please confirm the meeting is now being transcribed and recorded?

Clive Ormsby: Yes, it's being recorded and transcribed now.

Lynne Jennings: Thank you. For the record, once again my name is Lynne Jennings and I am the Chief of the Massachusetts Superfund Section in EPA Region 1's office. I will be the hearing officer for tonight's hearing on the proposed remedy for the Olin Chemical Superfund Site located in Wilmington, Massachusetts.

The purpose of this hearing is to only accept oral comments on the proposed plan released to the public on October 10th. You may also submit written comments to EPA according to the instructions presented in this proposed plan. A public information meeting on the proposed cleanup plan was held on August 25th. During that meeting, EPA was available to respond to clarifying questions about the site and our plan.

EPA will not be responding to comments tonight but will respond to them in writing after the comment period closes on October 26th.

EPA's proposed cleanup plan includes the following actions: Construction and operation of new extraction wells and treatment systems to remove Dense Aqueous-Phase Liquid or DAPL in highly contaminated groundwater. Construction and operation of new extraction and treatment systems to capture contaminated groundwater in Light Non-Aqueous Phase Liquids or LNAPL flowing into the surface water.

Construct and maintain caps and cover systems on areas of soil contamination that pose an unacceptable ecological risk. Construct and maintain a multilayer impermeable cap over the feature known as the containment area to prevent leaching and prevent unacceptable ecological risks.

Excavate approximately 4,000 cubic yards of contaminated wetland soil and sediment and dispose of it off-site in an appropriate approved facility and restore the wetlands and floodplains as needed. Prevent future exposure to

Trimethylpentanes that may pose inhalation risks via vapor intrusion by requiring additional evaluations in our mitigated – mitigation measures. Continue studies to close remaining data gaps, evaluate long term groundwater cleanup options leading to the selection of a final cleanup plan for the site, implement land use restrictions to protect the public health in the remedy, and conduct long term groundwater and surface water monitoring and periodic reviews to assess protectiveness of the remedy.

The total estimated cost of this proposed remedy is approximately \$48 million. Copies of the proposed plan have been made available on EPA's Olin website at www.epa.gov/superfund/olin.

Now, I would like to provide some instructions for the hearing. Anyone listening tonight can provide an oral comment. Please dial the number that is on the top left corner of the screen and provide the operator with the conference code. Once on the phone, please mute your computer to avoid audio disturbances.

The order of the question queue is also posted on the screen. We will start with those that preregistered and then move on to others. When I call your name and it is your turn to speak, the operator will unmute your line. Please state your name and address or your affiliation before giving your comments. After all the comments have been heard, I will close the formal hearing. I will now ask the operator to unmute the line of the first commenter which will be Jeff Hull.

Operator: Your line is open now, Jeff.

Jeffrey Hull: Good evening. My name is Jeffrey Hull, the Wilmington Town Manager, 121 Glen Road is town hall address, and I offer the following comments for the record.

There is no local issue that more fully unifies residents in Wilmington than cleaning up the Olin Superfund site. The discovery of contaminants on the Olin Corporation property predates my 33-year tenure with the town and we are now only reaching a point when remedial action is within sight.

For a community to be told that contamination within its borders is so pervasive and so severe as to merit designation as a Superfund site is a bit like the person who is diagnosed with cancer. The town wholeheartedly endorsed the Environmental Protection Agency taking charge of this site in 2006 to marshal its resources and expertise. However, as with cancer, there is much uncertainty and treatment offers no guarantees.

The deep-seated hope and expectation is that the course of treatment slash remediation prescribed by the experts will restore this ecosystem in South Wilmington to good health.

The five municipals wells that were shut down due to the detection of NDMA supplied over half of the water provided to residents and businesses. Each and every one of us who turns on the tap expects the water from the tap is safe for drinking, bathing, cooking and irrigation and it should be. The premise that businesses or anyone could dispose of chemicals in unlined lagoons or simply bury barrels without consequence to their neighbors or future generations seems unfathomable today.

But this is where we are in Wilmington, Massachusetts in 2020. It has been stated many times previously and it bears repeating that remediation plans must be designed and executed with the restoration of the town's drinking water in mind whether that effort takes 25 years or 125 years. The town's drinking water is a natural resource that future generations should have the right to safely enjoy.

In the absence of EPA requiring a rigorous and thorough restoration to enable reuse of the aquifer, polluters may conclude that if the contamination is severe enough or complex enough, they will not be held responsible for full clean-up.

The Olin Superfund site is incredibly complex due to the constituents of concern on site and off site along with migration of constituents in groundwater and in bedrock fissures. It also being along the divide of the maple, meadow and Arizona aquifers. Regardless of the scale and complexity of the contamination, EPA must hold the potentially responsible parties accountable to the highest standard of clean-up.

Over the past 20 years, the Olin site has been targeted for commercial redevelopment. There is recognition that one of the EPA objectives is to restore property for reuse. However, redevelopment efforts cannot be timed in such a way as to limit, curtail or infringe upon the ability of the potentially responsible parties, obligations and ability to conduct a complete and comprehensive clean-up and restoration as prescribed by EPA.

Any redevelopment must wait or work around the site conditions and remedial measures that are being established and are being implemented and not vice versa. The town recognizes that in spite of the extensive study of this area, data gaps remain and that those gaps must be addressed by gathering additional information that creates a clearer and more complete picture.

EPA's decision to propose an interim action for removal of dense aqueous phase liquids or DAPL, an extraction of groundwater hotspots at the level of 5,000 nanograms per liter while at a higher concentration threshold than the town would like to see is a start at removing contaminants.

The town believes that EPA should lower this concentration threshold as soon as practicable to ensure that the lower concentration of contaminants are removed as quickly as technically possible.

Concerning the remedial approaches to extract and treat groundwater, the discharge of treated groundwater should be completed in such a way to the greatest extent possible to minimize the inter basin transfer of groundwater between the two impacted watersheds. The proposed approach to address the containment area calls for placement of a permanent cap over the containment area with no excavation of upland soils.

The town strongly believes that a permanent cap is critical for keeping precipitation runoff from penetrating into the containment area. This cap is particularly critical given serious concerns about the structural integrity of the slurry walls in ability of the seams between the bedrock and slurry walls to contain the contaminants. The town shares EPA's concern that significant contamination likely remains undetected inside the containment cell.

Additionally, the fact that the contaminant area was constructed nearly 20 years ago raises serious concerns about its viability to continue to serve its intended purpose over the long term. These concerns reinforce the imperative that at a minimum a permanent cap be placed over the containment area.

The town also has concerns about the imposition of restrictions on use of wells in the area. While the intended purpose certainly has merit, the town would like to receive examples of regulations or bylaws that EPA has developed in conjunction with other communities with Superfund sites that have been adopted by those communities and that are achieving their intended purpose.

I would like to note that the town's environmental consultant GeoInsight is finalizing its technical comments which will be submitted to EPA prior to the October 26th, 2020 deadline. I wish to thank the team at EPA for your focused efforts to develop a game plan for what by all accounts is a tremendously challenging site. Thank you.

Lynne Jennings: Thank you, Jeff. Next up will be Jomarie O'Mahony.

Operator: Jomarie, your line is now open.

Jomarie O'Mahony: Thank you. Good evening. My name is Jomarie O'Mahony. I'm one of the members of the town of Wilmington's Board of Selectmen. I just wanted to join in my comment to support what Town Manager Hull just said to support what I believe Chairman Eaton is going to say shortly to join in what Representative Roberts and Senator Tarr will be submitting in writing, as well as our consultants at geo insights will be writing.

I would want to note, I am not a scientist, I don't understand the nuances of some of what – has been presented still, even though I've read the documentation and I think that makes me kind of a member of the community here and that we know there's a problem, we know it's a big problem, we know it's a problem that has gone on for over 40 years and we're happy to see – happy is probably not the right word, to see that there are now solutions being discussed, but unfortunately, I think a lot of people's sentiment at this point is too little too late.

So it is difficult for me to listen to the alternatives tonight being discussed with dollar signs on them when the four percent increase in mitigating something may seem minimal for a \$4 million increase, for example, in one of the alternatives.

But four percent improvement is better than zero improvement which is what the town has been dealing with not, if not a negative impact as things progress and the plume grows. So I would just ask the EPA, you submitted in your proposed plan the nine criteria of choosing the plan and I would ask for you to really focus on the community acceptance of the plan through our consultants and through our representation that you look at the long-term effectiveness, that you look at the short-term effectiveness and you realize that we're not as concerned with the dollar figure as we are with the human cause and we want this started now and we would like this to be done in a thoughtful way that finally addresses the issues that this town has been discussing for so long. Thank you.

Lynne Jennings: Thank you. Next up is (Gary Mercer).

Operator: (Gary Mercer), your line is open now.

(Gary Mercer): OK, thank you. My name is (Gary Mercer). I work on the Citizen Committee for the Wilmington Environmental Restoration and we've been working with EPA for about 12 years or more and many of us much longer than that with the DP stuff.

My comments on this are more of a technical nature since we've been reviewing these documents and working with EPA for a long time. I'm going to start out with groundwater hotspots, I think EPA can do more, obviously taking it down to 5,000 is good. But the standard that we're looking for MDMA is around 10,000.

So 5,000 to 10,000 is still a long way. I think it's an easy case to make to go down to 1,100, the other alternative. The cost is a bit more but it's only about

15 percent more, it's about 5,000 and we take out a lot more than that and I think that's a very good thing to do.

The additional wells you need to put in for them are not difficult sites to do, so I'm having difficulties to see why EPA picked the 5,000 one other than the efficiency of mass removal. Yes, you get a little less mass at 1100 but for a community that's waiting to get the number down to 10,000 in this watershed, I mean the aquifer, I think 1100 is a good step in the right direction there. I see it's hard to say why we wouldn't go to 1100 for that one.

One of my other areas of concern is the containment area, and this has been a long discussion we've had with the agencies and everyone on this one.

The containment area is sort of a containment area, it's not really keyed in to bedrock, so it really doesn't contain any of the groundwater, it can sip under it and will sip out of it and will continue to do that even after it's capped and the window goes out. So I'm a little concerned that we're going to be calling it containment area but it's not really a containment area, and I think that's sort of wrong in some ways.

I think there's two options here, one is actually is one your alternative said is to clean up the containment area, pull the soils out through above the levels, contaminant levels. You look at – put these alternatives together before the containment area investigations were done by Olin.

So I think if you go back and look at this actual soil data, you can come up with a better estimate of amount of soils that would have to be removed out of the containment area and not cap it at all because I think they're comparable to what we find in the outside.

On the other end, if you do want to cap it, I am wondering why the upland soils and the other soils like TMP is not put in the containment area, that's fairly standard on Superfund sites, I have a containment area, I take all the bad stuff off the site, I put it in the containment area and I cap it.

So I would say either that it's not a containment area and we clean it up and not cap it or if we are going to cap it, we take all of the soils off – outside that you're just going to pave over basically and put in that containment area.

One of my concerns on the upland soil ones and the TMP is the long history this site – in industrial use in many cases, having to trust them to pave it over and not disturb an area whether it's 25 years from now or 100 years from now. I think it's much better for the community if that contaminated soil, the upland soils much like the sediment and the wetland soil is moved offsite or put in a secure area. I just don't like the idea that somebody 40 years from now could decide to move around something and dig a new foundation and heaven below, they forgot all about that.

So I think it's another level of protection, either all the upland soils off the site or in the containment area overall. And my last major comment and I will put all these in writing as usual with this stuff, is the surface water question. And I've commented before to you what you were doing through this EPA is the number you selected. The PRG for ammonia is actually too high, the number should be lower I'm pretty certain.

And I think we've talked a little bit about that already. And I also, not certain if the wells you put are going to be adequate to achieve that PRG in the stream for ammonia or chrome. There's no analysis to support to say these wells would work, there's some on paper but there's no analysis to say I can remove enough groundwater and the receiving water will meet the ammonia standard.

So, I – there's a little more information needed there in order to determine whether the ammonias would be met overall for that one. I do think some of the things, not all negative comments, obviously, the DAPL removal is great and finally you can start moving on that and that will remove a lot of stuff. And the LNAPL program finally trying to address that and in that operation sometime in the foreseeable future to get all the old LNAPL out of that site overall.

So, I realized I threw a lot of technical stuff at you. All this stuff will be contained in our written comments for the October deadline. Again, thank you.

Lynne Jennings: Thank you, (Gary) and also I didn't thank (Jo Marie), my screen went blank so, I apologize for that. Next up is (Matt Crescenzo).

Operator: (Matt Crescenzo), your line is now open.

(Matt Crescenzo): Hi. My name is (Matt Crescenzo). I'm from Congressman Moulton's Office. I just want to say that I'm here representing the Congressman tonight and our office continues to remain available to assist both the town and the residents of Wilmington in any way we can during this process. Thanks.

Lynne Jennings: Thank you, (Matt). Next up will be Jonathan Eaton.

Operator: Jonathan, your line is now open.

Jonathan Eaton: Thank you. My name is Jonathan Eaton. I live at 18 Lawrence Street in Wilmington and I'm also a member of the Wilmington Board of Selectmen. The additional components under the action alternatives component includes a number of institutional controls that the town will be responsible for including the prohibiting of use of groundwater in the groundwater study area for potable or irrigation purposes.

The EPA is encouraging accomplishing this and other restrictions through the use of town ordinances, building permit requirements and other administrative controls. It will provide a significant benefit to the town in accomplishing these goals if they were described with more specificity and if you could reference other communities that have had to implement similar actions so that you could expedite these necessary changes to help facilitate the cleanup.

Remediating the aquifer to a drinkable standard should not be limited to onsite but should expand to the extent to the plume. While the current interim plan calls for cleanup of areas to a 5,000 nanograms per liter of NDMA, it is imperative that all locations both onsite and offsite are returned to that drinkable standard.

If the town is expected to implement restrictions on private property to prevent homeowners from using wells to access groundwater that was polluted by potentially responsible parties, it should be with the expectation that this resource is returned to a drinkable standard. The additional components under the action alternatives component also includes reference to the periodic five-year reviews to assess the remedy protectiveness.

The contemplated duration of this cleanup requires this periodic review to determine that the final plan is as effective as anticipated and that any changes later deemed necessary to accomplish the stated goals of the cleanup plan be made. I would encourage that those periodic reviews be diligent and analyze the effects of the plans as implemented and proactive in adjusting mechanisms to improve the effectiveness and duration of the cleanup as those opportunities may present themselves.

And finally, a basic tenet of our civil law is that the remedy should cure the injury caused. I would implore that the EPA use all administrative avenues available to them in facilitating the cleanup, the return to the quality of the water affected by the containment to that original drinkable standard. Thank you.

Lynne Jennings: Thank you, Jonathan. Next up is Martha Stevenson.

Operator: Martha Stevenson, your line is now open.

Martha Stevenson: Thank you. My name is Martha Stevenson. I'm a member of the Wilmington Environmental Restoration Committee. As mentioned by (Gary) a couple of minutes ago, we want first and foremost to thank the EPA for extending the comment period. This plan is a critical step forward and getting a cleanup started after so many years of waiting. I'd also like to thank our town manager, (Jeff Hull). He did a very eloquent job of capturing many of the same concerns we as also representatives, members of the community share.

I'd like to remind everyone first and foremost, the reason this site was brought into the Superfund program is because of contaminated groundwater. We're a

little disappointed that EPA's focus as has been Olin's throughout this process has been Olin's property, specifically at 51 Ames Street, the sediments, the soils, the streams. The real problem here is groundwater contamination and we should never forget that.

That being said, we were pleased that EPA finally took action and promoted a plan because Olin was never going to really get there. We strongly encourage our fellow residents to comment and, again, because EPA has extended the comment period, we have another month for you to weigh in and give your opinion.

At the same time, we're very disappointed and I think we've expressed this to EPA in meetings already that the format of this meeting is just so unfriendly to the many, many residents and citizens in Wilmington and North Woven who have participated in these public meetings in the past. So, it's a real disservice to have a virtual meeting where we've had as many as 400 people in person to express our concerns and to listen and to really understand what's going on with this.

That being said, there are a number of proposed actions that EPA is proposing that WERC agrees with and several that, I think, (Gary) enumerated we don't think go quite far enough. The contaminated soils on the property should not just be covered over. They should be cleaned up.

Olin has had ample opportunity and time to get serious about removing contaminated groundwater. They have known about NDMA being present on their site since at least 1990.

And they knew even by early 2000s – 2002 that NDMA had migrated over to our municipal drinking water wells. They should get zero consideration and we don't care what it costs them for now arguing, it will be impossible to remove NDMA from our water supply because they let it languish for so many years it's not migrated far and wide.

They are responsible for not taking urgent action 20 or even 30 years ago. EPA must hold Olin accountable. Thank you.

Lynne Jennings: Thank you, (Martha).

Next up will be (Suzanne Sullivan).

Operator: (Suzanne), your line is now open.

(Suzanne Sullivan): Thank you. (Suzanne Sullivan), 60 Warren Street. I just want to first thank everybody for commenting already and the people that are listening and we really, really appreciate it.

I do want to say that I concur with (Martha) about my disappointment but I – with this proceeding, but I also have some written comments, so I guess I'll read those. I usually don't write comments down but it's just, I figured it's not a very comfortable situation talking on the phone with this stuff, so I wrote it down.

WERC will be issuing more official comments on the technical merits of the proposed remediation plans, so tonight is more about establishing a record and to speak from the community perspective rather than a technical one.

Although, we do fully support the EPA's effort to move the remediation forward, the devil is in the details. WERC cannot be more disappointed in the outcome of the process we are participating in today.

WERC has reached out to the community to help the EPA with the requirements on the Superfund and to also meet our requirements under the Technical Assistance Grant. We do recognize to current situation with the pandemic and also understand the limitations.

Unfortunately, lives lost to the pandemic is not the only casualty of COVID-19. Democracy has also suffered a major blow. And these remote meetings surely highlight such. WERC will continue to engage the community and hopes more people will continue to comment and pay attention via emails and letters and hopefully by phone.

But a lot of people that are older and do not and cannot participate in this manner that have participated in the past could not be heard. Secondly, as

previously, there is a final – finally a cleanup plan on the horizon after over 20 years of promises, assurances, and rhetoric from Olin and the agencies that oversee Olin, we are also disappointed to some regard.

Well, we all – hold on, because there's always – they seem to always go in the favor of Olin, not the community, part of this process is to gather community support but how does one gather support during a pandemic?

Please also be reminded community is not just the town and government, the boards, the employees. It's the whole community. As kind and respectful as EPA has been to WERC, we, as a group that represents the residents of the community through a citizen advocacy avenue feel the need to make part of the record our feelings about the process that has brought us to where we are today in the injustices that have been committed against our residents.

We realized that in making these comments part of the record that the EPA can or cannot take them into consideration when deciding on the final remedial options but maybe, just maybe it will pull on the heart strings on one or two of the EPA – it will pull on the heart string or two of the EPA and maybe become more of an advocate of the people and not for Olin.

Maybe someone, somewhere will read this in the archives and prevent what happened to Wilmington from happening to someone else or maybe Olin will actually make amends and do the right thing for the community it has hurt so much.

I want to thank everybody for their comments. Once again, please be reminded of the history that brought Olin into the Superfund program. For years, Olin came to the board of selectmen meetings alongside with (DEP) showing charts, tracking the contamination from what they called a stable plume of contamination, the so-called DAPL.

They were tracking this contamination into the Wilmington water supply, Olin and DEP assured the town that the contamination was OK even though it was coming into our wells. Unfortunately, that contamination was naturally attenuating in the bodies of the Wilmington residents.

And just for the record, Olin has preferred remediation of the site in 2000, which DEP gave the OK with natural attenuation at that time. They continually told our town that the water is safe to drink, that it met all standards. Our board of selectmen thanked them, thanked (DEP) and watched – thanked the (DEP) for watching out for us, but the citizens were not convinced.

We reviewed files. We looked up their chemicals. We found out what they were not testing for and we found out they were not testing for everything. Their statements are only half true. Yes, the water did meet the standards, but it was not safe, sort of like the mentality of if you do less COVID-19 testing, then you have less COVID-19 to report.

Good for shareholders and PR, bad for the people and the environment. When Olin was required to test for NDMA because the citizens and town pushed the DEP to require it, indeed it was there. A toxin that has no standards, but is deadly. No matter what the childhood cancer study says, we all know in our hearts what the truth is. That was over 20 years ago and here we are today. Olin is poised to sell their property and there is a legitimate concern that it will cause more insult to injury. That is just plain wrong to do that to a community that has already been hurt.

For the EPA to claim that – claim they chose the scenario of less truck traffic to minimize the impact to the area, the containment area and the area – well, they claim to close – they chose the scenario of less truck traffic to minimize impact to the area where there is a proposal on the table to have those impacts daily, seven days a week, 24/7 is so disingenuous.

The impact that I'm talking about is the removal of the soils from the containment area would've created 400 truck trips today and that scenario was not chosen because it would impact the area. And we find that pretty disingenuous.

Olin is a corporation that has its own army people to protect, but the residents of Wilmington need to depend on the government to protect us. A corporation can't get sick, can't get cancer, can't have children, can't drink the water they

contaminated and it certainly won't be hurt by the new development that is proposed in their property, but the people of Wilmington have been hurt and will continue to be hurt if our advocates do not do the right thing for us.

Therefore, we ask the EPA to take the hardest line on Olin and consider the most protective measures like going to the 1100 (NGL) hotspots instead of the 5,000. WERC also realizes this plan may be the only we get in our lifetime. We are realists, we get it. We get the process. Eight years is a long time to wait for results. Why not go for the 1100 (NGLs)?

We ask that the data gaps be closed before (OU1) and (OU2) be finalized. We want the site fully characterized. I think after 25 years that is not an unreasonable request. The fact that data gaps have not been closed is a travesty and an insult to the community. We strongly urge and ask that these gaps be filled before any development in the property and any close out of the (OU1) and (OU2).

Olin has allowed the unmitigated groundwater contamination to spread and travel to Lord knows where and the EPA has been unable to make them budge until now. Great plan by Olin, right? Let the contamination spread and then claim they have spread – it is unfeasible to clean-up.

WERC is fully aware that this process and we now are in a step – that we are now in a step to technical and feasibility waivers. For this reason, WERC wants the (OU) to be in the groundwater piece done in tandem, not separately from (OU1) and (OU2). We care most about the contaminated groundwater. Imagine where we would be today if the (DEP) had made Olin to a (pump and treat) in the containment area 20 years ago when the citizens asked for it back then.

We don't want to hear that it's too expensive. They had that – they should've done it years ago and they didn't – 20 years ago. We want a real clean-up, not cover up the contaminating materials including the so-called containment area that really is not containing according to the docs. WERC wants the Zone 2 of the wells defined, we asked continually years ago to have this done to no avail.

Since the containment area has been installed there has been no groundwater study done in the area. The future use of the property and the remedial outcomes are supposed to be predicated on where the Zone 2 is. How can this happen when the Zone 2 is suspect since it was done in the '70s before the containment area and where it was put in?

We want the town, the (DEP), and the EPA to do their jobs and adequately design – define the Zone 2 of the Maple Meadow Brook wells. WERC wants problems addressed now. We don't want to have them addressed later. We have waited for long enough. Stormwater discharges and treated water is a concern. We expect that the wetlands will be restored to natural wetlands.

Once again, WERC will submit more technical comments, these are meant as more community comments. The community does not care so much about the technical issues. They care more about the EPA doing the right thing on their behalf and the behalf of the – and on behalf of the people. The community has been hurt. It needs to heal. A strong clean-up plan is a step in the right direction. The question is, is this the best, most responsible plan or can EPA make it better? Thank you.

Lynne Jennings: Thank you, (Suzanne). Next up will be (Liz Harriman).

Operator: (Liz Harriman), your last – your line is now open.

(Liz Harriman): Thank you. Yes, this is (Liz Harriman) also with the community group WERC. All the comments before me have been spot on and so I won't repeat all those. Certainly, I want to echo them and particularly, the goal the EPA has been reassuring us of since the beginning that the goal is to restore the aquifer to drinking water standards.

We appreciate the EPA is focusing on removing source material and has really tried to push that forward even in light of Olin's reticence to move forward, but nevertheless, every single day, more contamination seeps into the fractured bedrock.

We support the most aggressive approach possible and schedule to removing that source material. EPA says that many decisions about the specific

extraction wells and coverage will be determined during the design phase for source removal and it's just not satisfactory to approve an interim action without having a better idea of the actual extent of contamination and the design and how much material and at what rate the source material is going to be removed.

So we really want to see that design and the installation of those extraction wells as soon as physically possible. Again, WERC will be submitting comments and we certainly appreciate the EPA is trying to move this along at a good pace. Thank you.

Lynne Jennings: Thank you, (Liz). Next up will be (Ethan Sawyer).

Operator: (Ethan Sawyer), your line is now open.

(Ethan Sawyer): Hi. My name is (Ethan Sawyer). I live at 58 Lawrence Street. I'm primarily concerned with what the long-term future of the community will be. I know that the national priorities list for the superfund site focuses on reuse of the superfund sites. I know that Olin Chemical is an international company that heavily relies upon railway as a primary method to transport finished products to customers and to transport raw materials to the manufacturing facilities used by each of Olin's businesses.

Olin Chemical intended to sell or lease the superfund site to a company that would use the property as a waste transfer station. Olin still has an agreement in place that would allow New England Transrail to build and operate a truck to rail transfer station which is expected to transport and store various chemicals, construction and demolition debris, municipal solid wastes, and contaminated soil.

New England Transrail was and still is doing business as Wilmington and Woburn Terminal Railway construction acquisition and operation exemption in Wilmington and Woburn, Massachusetts. New England Transrail has put those efforts on pause while they now operate as a new company named Wilmington Woburn Intermodal, LLC with a stated purpose of purchasing and developing the property at 51 Eames Street.

The definition of the word intermodal is a method of conveying goods involving two or more different modes of transportation. We know they're not using boats over there and we know they're not using airplanes over there. So kind of leaves us with trucks and railway. The town took a strong position against New England Transrail, but seems more accepting of the new alternative solution. But I still have a lot of concerns that eventually the Olin site will be reused for transmodal or truck to trail transportation of goods and housing of those goods.

And so, the question that I have is really I guess in part to Olin we stay, intend to use railway at 51 (Union Street) to transport warehouse chlorine or other chemicals that they are in the business of selling and transporting.

And then to the state I know that we are down to sort of the last two considerations, the nine of the criteria for getting this plan approved which is community support, and state support, and so, I have concerns that there is only one deed restriction on the property and it has to do with not using the contaminated groundwater but outside of that I feel like we are left wide open to all the same concerns that, all the same risks that we were, the community 15 years ago when New England Transrail first came around.

And I guess that's really my concern knowing that this is the focus and that we have seemingly have not done a lot to protect ourselves. Thank you.

Lynne Jennings: Thank you, Mr. (Sawyer). Next up will be (Stephanie Bama).

Operator: (Stephanie Bama), your line is now open.

(Stephanie Bama): Thank you. Hi my name is (Stephanie Bama). Our address is (14 Kelley Road) in Wilmington. The comments that I would like to submit are nothing that hasn't already been said but I would like to lend my voice to the following four points.

First, a reiteration of exasperation at the long drawn-out timeline that we are seeing but admitted slight release at the movement that is seemingly beginning, second, agreement with the reiteration that the goal should be restoration of the drinking water quality at the (aquifer). Third,

encouragement that the knowledge gaps be filled before any final remediation decisions are made with incomplete data because that would be a mistake. And four, I want to encourage the EPA to hold (OM seats) to fire, their prime example of negligence and corporate abuse and their preferences should be of no value whatsoever in these decisions.

I hope that they are responsible for as much as the bill is possible to diminish that which will be footed by the taxpayer. Thank you.

Lynne Jennings: Thank you, (Stephanie). So that, this point concludes the list of people that both registered or asked to participate during the meeting. We welcome anybody else that still on the line that would like to offer an oral comment, you may do so as well. You could send us a message in the text support box or simply dial the telephone number that is on the welcome screen, 883-681-4865 and provide the operator with a conference code of 8377541.

We are going to keep the line open. We are planning to stay here until 9:00 o'clock in case there are other folks that dial in a little bit late and want to offer a verbal comment. We appreciate the comments and feedback we've received thus far and as I said earlier we will be providing responses to those as part of our record of decision in our written responsive summary.

Welcome, you are listening to the public hearing on EPA's proposed clean-up plan for the Olin chemical site in Wilmington, Mass. Again, my name is Lynne Jennings from EPA's Boston office and I am the hearing officer. We are accepting oral comments on EPA's proposed clean-up plan issued to the public in August. EPA is also accepting written comments and comments provided by voice mail. See our website. If you would like to make a comment please dial the number on the screen and provide the operator with the conference code, also on the screen, and you will be added to our queue to make a comment.

We will not be responding to comments today but we'll respond to them in writing in a response to comments document which will be included with EPA's final clean-up decision. Thank you. We will continue to stay on the line until 9:00 o'clock.

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If you would like to make a comment tonight please dial 833-681-4865, and provide the operator with the conference code 8377541. And you will be added to our queue to make a comment. We will not be responding to comments today but we'll respond to them in writing in a response to comments document which will be included with EPA's final clean-up decision. Once again we will remain on the line until approximately 9:00 o'clock. Thank you.

Hello, this is Lynne Jennings from the EPA, the hearing officer for tonight's meeting on the Olin chemical site. It is now 8:55. I believe I've heard from everybody that would want to offer an oral comment during this hearing. Once again folks can still offer written comments and provide verbal comments by voicemail by following the instructions on our website.

This concludes our public hearing on the proposed plans of the Olin chemical site in Wilmington, Mass. I'd like to thank you all for your participation in this meeting. Have a nice evening.

END